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lens group 46 preferably includes a fixed focal length lens but may also include a varifocal or zoom lens. The optical components are preferably held together by a magnesium die-cast optical frame 48 (only a portion of which is shown) within a projector housing (not shown) which is mechanically rigid and dissipates heat. Such frames and housings are well known to skilled persons and can be adapted to house a cooling fan 50 for cooling the optical components and facilitate cooling air flow. Power supply 34 can also be used to power a cooling fan (not shown in Figure 2) and display controller 56.

*Please replace the paragraph on page 8, line 26 to page 9, line 3 with:*

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Fig. 3 presents an embodiment in which light sources 32 comprise multiple LED arrays 70 of multiple LEDs 72 on a substrate 74 and light transmission guides 38 include optical fibers 76. Light sources 32 may also comprise arrays of multiple laser diodes as the multiple LED arrays 70 without departing from the principles of the invention. Ends of optical fibers 76 extend through, and are held in place by, holes in a cover plate 80 and are mated to LEDs 72 in a one-to-one relationship. In this embodiment, the LEDs 72 and holes are aligned in rows 82 and columns 84.

IN THE CLAIMS

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- 1. (Amended) An apparatus comprising:*  
a first set of light emitting devices(LEDs) to generate light having a first wavelength during a first emission time period;  
a second set of LEDs to generate light having a second wavelength during a second emission time period, the second wavelength being different from the first wavelength;  
a display controller coupled to the first set of LEDs and the second set of LEDs, the display controller to generate a first and second control signal respectively in accordance with a first and second color frame data, the first control signal to enable the

first set of LEDs during the first emission time period, and the second control signal to enable the second set of LEDs during the second emission time period; and

first and second light transmission guides to route light from the first and second sets of LEDs to a first and second display device.

2. (Amended) The apparatus of claim 1, further comprising:

a third set of LEDs to generate light having a third wavelength during a third emission time period, the third wavelength being different from the first and second wavelengths; and

a third light transmission guide to route light from the third set of LEDs to the display device;

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wherein the display controller is further to generate a third control signal in accordance with a third color frame data to enable the third set of LEDs during the third emission time frame.

3. (Amended) The apparatus of claim 2 wherein the first, second, and third sets of LEDs emit red, green, and blue light, respectively.

4. (Amended) The apparatus of claim 2 wherein the first, second, and third sets of LEDs emit yellow, cyan, and magenta light, respectively.

5. (Amended) The apparatus of claim 2 wherein the first, second, and third sets of LEDs are light emitting diodes.

6. (Amended) The apparatus of claim 2 wherein the first, second, and third sets of LEDs are laser diodes.

7. (Amended) The apparatus of claim 2, further comprising first, second and third switches coupled between the display controller and the first, second and third sets of LEDs, respectively, wherein the display controller generates a compensating control signal to operate on at least one of the first, second, and third switches to compensate for a failed LED in the first, second, and third sets of LEDs, respectively.

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8. (Amended) The apparatus of claim 2, wherein the first, second, and third control signals further operate on a current level of a current source to adjust the brightness of the light emitted by the first, second, and third sets of LEDs, respectively.

9. (Amended) The apparatus of claim 2, wherein at least one of the first, second, and third sets of LEDs further comprises at least one set of series-parallel arrays of LEDs.

*Please cancel claims 10-18 without prejudice.*

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19. (Amended) A circuit comprising:  
a means for generating light having a first wavelength during a first emission time frame from a first set of light emitting devices (LEDs);

a means for generating light having a second wavelength during a second emission time frame from a second set of LEDs, the second wavelength being different from the first wavelength;

a means for providing a shared current source to the first and second set of LEDs from a power supply;

a means for coupling a display controller to the power supply and the first and second sets of LEDs, the display controller adapted to having a means for generating a first and second control signal respectively in accordance with a first and second color frame sequential data, the first control signal operating to drive the first set of LEDs during the first emission time frame, and the second control signal operating to drive the second set of LEDs; and

means for routing the light from the first and second sets of LEDs to first and second display devices.

20. (Amended) The circuit of claim 19, further comprising:

a means for generating light having a third wavelength during a third emission time frame from a third set of LEDs, the third wavelength being different from the first and second wavelengths;

a means for providing the shared current source to the third set of LEDs from the power supply; and

means for routing the light from the first and second sets of LEDs to first and second display devices;

wherein the display controller is further adapted for generating a third control signal in accordance with a third color frame sequential data, the third control signal operating to drive the third set of LEDs.

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21. (Amended) A circuit comprising:

- a means for generating light having a first wavelength from a first set of light emitting devices(LEDs);
- a means for routing the light from the first set of LEDs to a first display device;
- a means for generating light having a second wavelength from a second set of LEDs, the second wavelength being different from the first wavelength;
- a means for routing the light from the second set of LEDs to a second display device;
- a means for providing a first and second current source from a power supply to the first and second set of LEDs, respectively;
- a means for coupling a display controller to the power supply, the display controller adapted to having a means for generating a first and second control signal respectively in accordance with a color frame data, the first control signal operating on the first current source to drive the first set of LEDs, and the second control signal operating on the second current source to drive the second set of LEDs.

22. (Amended) The circuit of claim 21, further comprising:

- a means for generating light having a third wavelength from a third set of LEDs, the third wavelength being different from the first and second wavelengths;

a means for routing the light from the third set of LEDs to a third display device;  
a means for providing a third current source from the power supply to the third set of LEDs; and

wherein the display controller is further adapted to having a means for generating a third control signal in accordance with the color frame data, the third control signal operating on the third current source to drive the first set of LEDs.

23. (Amended) A method for driving an array of light emitting devices (LEDs) in a projection display system comprising:

receiving a respective first and second color frame image data;

generating a first and second control signal in accordance with the respective first and second color frame image data;

generating light having a first wavelength from a first LED color channel during a first emission time frame in response to the first control signal;

generating light having a second wavelength from a second LED color channel during a second emission time frame in response to the second control signal; and

propagating the light from the first and second LED color channels to first and second display devices.

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24. (Amended) The method of claim 23, further comprising:

receiving a respective third color frame image data ;

generating a third control signal in accordance with the respective third color frame image data;

generating light having a third wavelength from a third LED color channel during a third emission time frame in response to the third control signal; and

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propagating the light from the third LED color channel to the display device.

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25. (As Filed) The method of claim 23 wherein the first, second, and third LED color channels emit red, green, and blue light, respectively.

26. (As Filed) The method of claim 23 wherein the first, second, and third LED color channels emit yellow, cyan, and magenta light, respectively.

27. (Amended) The method of claim 23 wherein the first, second, and third control signals operate on a power supply coupled to the first, second, and third LED color channels to enable the first, second, and third LED color channels, respectively.

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28. (Amended) The method of claim 23 wherein the first, second, and third control signals operate on a first, second, and third switch coupled to the first, second, and third LED color channels to enable the first, second, and third LED color channels, respectively.

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29. (As Filed) The method of claim 23, wherein the first, second, and third LED color channels comprise at least one of a plurality of series parallel array of light emitting diodes.

30. (As Filed) The method of claim 23 wherein the first, second, and third LED color channels comprise at least one of a plurality of series parallel array laser diodes.

31. (As Filed) The method of claim 27, further comprising generating a compensating control signal to operate on the power supply to compensate for a failed LED in at least one of the first, second, and third LED color channels.

32. (As Filed) The method of claim 28, further comprising generating a compensating control signal to operate on at least one of the first, second, and third switches to compensate for a failed LED in at least one of the first, second, and third LED color channels, respectively.

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33. (Amended) The method of claim 23, wherein the display device comprises a DMD, LCOS, or LCD.

34. (As Filed) A method for driving an array of light emitting devices (LEDs) in a projection display system comprising:  
receiving a respective first and second color data for driving a respective first and second imaging devices;  
generating a first and second control signal in accordance with the respective first and second color data;

generating a first light having a first wavelength from a first LED color channel during a first emission time frame in response to the first control signal;

generating a second light having a second wavelength from a second LED color channel during a second emission time frame in response to the second control signal; and

propagating the first and second lights to the respective first and second imaging devices.

35. (As Filed) The method of claim 34, further comprising:  
receiving a third color data for driving a respective third imaging device;  
generating a third control signal in accordance with the third color data;  
generating a third light having a third wavelength from a third LED color channel during a third emission time frame in response to the third control signal; and  
propagating the third light to the respective third imaging device.

36. (As Filed) The method of claim 35 wherein the first, second, and third LED color channels emit red, green, and blue light, respectively.

37. (As Filed) The method of claim 35 wherein the first, second, and third LED color channels emit yellow, cyan, and magenta light, respectively.

38. (As Filed) The method of claim 35 wherein the first, second, and third control signals operate on a first, second, and third current source coupled to the first,

second, and third LED color channels to continuously generate the first, second, and third lights, respectively.

39. (As Filed) The method of claim 38 wherein the first, second, and third control signals further operate to adjust a current level of each of the first, second, and third current sources to adjust the brightness of the first, second, and third lights, respectively.

40. (As Filed) The method of claim 35, wherein the first, second, and third LED color channels are comprised of at least one of a plurality of series parallel array of light emitting diodes.

41. (As Filed) The method of claim 35, wherein the first, second, and third LED color channels are comprised of at least one of a plurality of series parallel array laser diodes.

42. (As Filed) The method of claim 38, further comprising generating a compensating control signal to operate on at least one of the first, second, and third current sources to compensate for a failed LED in at least one of the first, second, and third LED color channels, respectively.

43. (As Filed) The method of claim 35, wherein the imaging device comprises a DMD, LCOS, or LCD.

*Please add the following new claims:*

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44. (New) The apparatus of claim 2 wherein the first light transmission guide comprises a first plurality of optical fibers optically coupled with one or more of the LEDs from the first set of LEDs and a light pipe integrator coupled with the first plurality of optical fibers, and wherein the second light transmission guide comprises a second plurality of optical fibers optically coupled with one or more of the LEDs from the second set of LEDs and a light pipe integrator coupled with the second plurality of optical fibers, and further wherein the third light transmission guide comprises a third plurality of optical fibers optically coupled with one or more of the LEDs from the third set of LEDs and a light pipe integrator coupled with the third plurality of optical fibers.

45. (New) The apparatus of claim 44 further comprising a first display device to receive light from the first set of LEDs through the first transmission guide, a second display device to receive light from the second set of LEDs through the second transmission guide and a third display device to receive light from the third set of LEDs through the third transmission guide.

46. (New) The apparatus of claim 45 wherein the first, second and third display devices comprises one or more of: a micromirror device, a transmissive liquid crystal display, and a reflective liquid crystal display.

47. (New) The apparatus of claim 46 further comprising an optical combiner to receive light from the first, second and third display devices.

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48. (New) The apparatus of claim 47 further comprising a projection lens to project an image provided by the optical combiner.